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NORFOLK MARU
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CONSTRᴺ PROFILE & DECKS

S/S NORFOLK MARU

Kobe Rpt No 3308

MIDSHIP SECTION.

KASAKI. YD. N° 478

S/S NORFOLK MARU.

KOBE RPT N° 3308

No 478

MIDSHIP SECTION.

SCALE $\frac{1}{2}$" = 1'-0"

TO CLASS TEISHINSHO RULE 1ST CLASS VESSEL & LLOYD'S 100 A1 WITH FREE BOARD.

PRINCIPAL DIMENSIONS.

LENGTH BETWEEN P. P.	405'-0"
BREADTH MOULDED	53'-0"
DEPTH " TO AW. DECK	37'-0"
HEIGHT BETWEEN UP. & AW. DKS	8'-0"
" " " " 2ND "	9'-6"
" " AW. " F'CLE "	6'-3"

SCANTLING NUMBERS.

B	53
D	29
TRANS. No	82
L	405
LONG. No	33,210
L/D TO AW. DK.	10.95
d " UP. "	25'-5" IN MACH. SPACE.
" " 2ND "	15'-11"

FORGING & CASTINGS

STEM OF ROLLED MILD STEEL	$10\frac{1}{2}$" × $2\frac{3}{4}$"	
STERN FR. PROP. POST.	$10\frac{1}{2}$" × $7\frac{1}{2}$"	OF CAST STEEL.
RUDDER "	9" × $7\frac{1}{2}$"	

RUDDER FRAME OF CAST STEEL AS PER DETAIL PLAN.

EQUIPMENT NUMBER.

LONGITUDINAL NUMBER	= 33.210
ERECTIONS (405 × 8 × 0.75) + (31.45 × 6.25 × 0.75)	= 2,577.42
DECK HOUSES (26 + 52) × 7.5 × 0.5	= 292.50
" " (16.25 × 8.75 + 44.96 × 7.75) × 0.5	= 245.31
NUMERAL	= 36,325.23

EQUIPMENT.

3 BOWER ANCHORS (STOCKLESS)	61 C.W.T.	EACH	
1 STREAM ANCHOR (COMMON)	$17\frac{1}{2}$ "	EX. STOCK.	
1 KEDGE " (")	$7\frac{1}{2}$ "	"	
$2\frac{4}{16}$" STUD CHAIN CABLE	270	FATHOMS	
$4\frac{3}{4}$" STEEL WIRE FOR STREAM ANCHOR	90	"	
5" " " TOW LINE	120	"	
2 COILS OF 8" MANILLA	90	"	EACH
2 " " 7" "	90	"	"

ROWS OF RIVETS IN BUTT

ITEMS	½ L ⊗	ENDS
AWNING DK. STRINGER PLATE	3	3
" " PLATING	2	1
UPPER " STRINGER PLATE	3	3
" " PLATING	2	1
SECOND " STRINGER PLATE	3	3
" " PLATING EXCEPT TOP OF DEEP TANK WHERE DOUBLE.	1	1
SHEER STRAKE	4	3
STRAKE BELOW SHEER STRAKE	4	3
SIDE PLATING OF SHELL	3	3
BOTTOM " " "	4	3
BOSS " " "		4
KEEL PLATE	4	4-3
MIDDLE LINE STRAKE OF INNER BOTTOM PLATING.	3	3-2
INNER BOTTOM PLATING.	2	1
MARGIN PLATE	3	2
CENTRE GIRDER	3	3
FORECASTLE DK. STRINGER PLATE		2
" " PLATING.		1

RIVETING

ITEMS	PITCH OF RIV. Cᴿ TO Cᴿ IN ITS DIA.
FRAME TO SHELL	7, $5\frac{1}{2}$ IN PEAK & DEEP TANKS, & IN DOUBLE BOTTOM BEFORE 3/5 L ⊗ ALSO IN MACH. SPACE
FRAME TO FLOORS IN AFT PEAK	5
" " REV. FR. " " "	$5\frac{1}{2}$
" " " " " MACH. SPACE	7
BUTTS OF SHELL PLATE	$3\frac{1}{2}$, 4 IN 4PLE BUTT LAP
SEAMS " " "	5-FOR $1\frac{1}{8}$" RIV. 6-FOR 1" RIV. 7-FOR 7/8" RIV. IN No BETWEEN FRS. & 4 DIA. Cᴿ TO Cᴿ AT ENDS
DK. PLATE TO BMS	7, 6 ON BEAMS TO ALT. FR. & IN DEEP TANK.
BUTTS OF STRINGER PL.	$3\frac{1}{2}$
" " DK. "	4
EDGES " " "	$4\frac{1}{2}$
GUNWALE ANG.	$4\frac{1}{2}$
DK. STR. "	7
DOUBLE BOTTOM	
BUTTS OF MARGIN PL. & CENTRE GIRDER.	4
BUTTS & EDGES OF INNER BOTTOM PL.	4
MARGIN ANG.	$4\frac{1}{2}$
KEEL "	5
FLOOR PL. TO FR. & REV. FR.	7
VERTICAL ANG. ON Cᴿ Gᴿ AT ENDS	5
" " " SIDE "	7
ANG. AT TOP OF CENTRE GIRDER	7, 5 WHERE Cᴿ Gᴿ W.T.
TOP & BOTTOM ANG. ON SIDE GIRDER	4 RIV. IN No BETWEEN FRS.
BUTTS & SEAMS OF BHD PL.	$4\frac{1}{2}$ EXCEPT BOUNDARY BHD OF DEEP TANK. WHERE $3\frac{1}{2}$
BULKHEAD BOUNDARY ANGLES	5, $4\frac{1}{2}$ FOR SINGLE RIV. ANGLES.
" STIFFENERS	7 EXCEPT IN DEEP TANK WHERE 6
SIDE STR. FACE ANGLE.	7
" " SHELL FLANGE OF INTERCOSTAL PL.	4 RIV. IN No BETWEEN FRS.
W. S. PILLARS & GIRDERS EXCEPT GIRDER TO DK.	7
INTERCOSTAL PL. OF DK. GIRDER TO DK.	5
SHELL PL. TO STEM & STERN FRAME.	5

W. T. BULKHEADS.

7 IN NUMBER EXTEND TO UPPER DECK EXCEPT COLLISION & AFT END BHD OF DEEP TANK WHICH FORMER EXTEND TO AWN. DK. & THE LATER EXTEND TO SECOND DK.
BULKHEAD STIFFENERS AS IN FOLLOWING TABLE:-

FRAME No	HOLD		LOWER TWEEN DECK		UPPER TWEEN DECK	
	STIFFENERS	SPACING	STIFFENERS	SPACING	STIFFENERS	SPACING.
FR. No 9	7" × 3" × .40" B. ANG.	24"	5" × 3" × .32" ANG	30"		
" " 35	$9\frac{1}{2}$" × $3\frac{1}{2}$" × .55" B. "	30"	" "	"		
" " 58	9" × $3\frac{1}{2}$" × .525" B. ANG	24"				
" " 74	" "	"	5" × 3" × .32" ANG.	30"		
" " 98	" "	30"	" "	"		
" " 149	10" × $3\frac{19}{32}$" × $3\frac{19}{32}$" × .575"]	"	" "	"		
" " 177	Vᴸ STIFF. 10" × $3\frac{19}{32}$" × $3\frac{19}{32}$" × .575"] Hᴸ " 8" × $3\frac{1}{2}$" × .45"]	24" 48" UNDER	5" × 3" × .40" "	24"	$3\frac{1}{2}$" × 3" × .30" ANG.	24"
LONGᴸ BHD IN DEEP TANK	8" × $3\frac{1}{2}$" × .40"]	26"				

2ND DK. BEAMS :- 12" × $3\frac{1}{2}$" × $3\frac{1}{2}$" × .60"] TO ALT. FR.
7" × 3" × .40"] TO EVE. FR. IN PEAKS
DEEP TANK TOP - $8\frac{1}{2}$" × 3" × .42" - .44"] TO " " WITH 3 ROWS OF GIRDER
HATCH END BEAMS IN DEEP TANK 10" × $3\frac{1}{2}$" × .68"]

31" × .54"
29" × .50" IN PEAKS

DOUBLE BOTTOM:-

CENTRE GIRDER 43" × .50" - .40", .60" IN B. SP.
SIDE " .40" - .36" .50" IN B. SP.
TOP $3\frac{1}{2}$" FLANGED TO INNER BOTTOM. EXCEPT IN E. SP. UNDER W. S. PILLARS & BEFORE 3/5 L ⊗ WHERE $3\frac{1}{2}$" × $3\frac{1}{2}$" × .40" ANG.
No OF SIDE GIRDER - TWO AT EACH SIDE & ADDITIONAL GIRDER IN E. SP. & BEFORE 3/5 L ⊗
MARGIN PL. .48", .58" IN B. SP. DEPTH ABOVE 33" - 28" AT AFT END, ABOUT 44" IN E. & B. SP.
FL. PL. & T. SIDE BRACKETS .40" - .36", .50" IN B. SP.
INNER BOTTOM PLATING.
M. LINE STRAKE 43" × .50" - .40", .56" IN B. SP. .88" UNDER ENG.
OTHER " .40" - .36" .48" IN E. SP., .56" IN B. SP.
.48" UNDER HATCHWAY IN DEEP TANK
FRAMING :- SOLID FL. TO EVE. FR. UNDER E. SP., BEFORE 3/5 L ⊗ & No 4 HOLD ALSO UNDER B. BEARERS & W. S. P. & BHDS. TO ALT. FR. ELSEWHERE.
FRAMES $3\frac{1}{2}$" × $3\frac{1}{2}$" × .40" ⅂, DOUBLED BEFORE 3/5 L ⊗
REV. FR. " , .50" IN B. SP., DOUBLED IN E. SP. & UNDER B. BEARER $4\frac{1}{2}$" × $4\frac{1}{2}$" × .60" ⅂Γ.

FRAMING :-

SPACE 26" & 24" IN PEAKS.
HOLD :- $9\frac{1}{2}$" × $3\frac{1}{2}$" × .55"] EXTEND TO UPP. & 2ND DKS ALTᴸʸ, & UPP. & F'CLE DKS ALTᴸʸ IN WAY OF F'CLE DK.
LOWER TW. DK. INTERMEDIATE, UPP. TW. DK. & ERECTION SIDE INTERMEDIATE FRS. 7" × $3\frac{1}{2}$" × .40" ⅂ WITH PARTIAL BHDS IN UPP. & LOWER TW. DKS AS PER PROFILE.
FORE PEAK:-
7" × $3\frac{1}{2}$" × .44"] EXTEND TO UPP. & F'CLE DKS ALTERNATELY.
INTERMEDIATE TW. DK. FRS. 6" × $3\frac{1}{2}$" × .38" ⅂
AFT PEAK :- FR. 6" × $3\frac{1}{2}$" × .38" ⅂ EXTEND TO AWN. DK.
REV. FR. $3\frac{1}{2}$" × 3" × .38" ⅂ " " UPP. "
DEPTH OF FR. 6"
WEB FRAMES AT FORE END HOLD
WEB PL. 27" × .48", FACE ANG. 7" × $3\frac{1}{2}$" × .64" ⅂
SHELL ANG $3\frac{1}{2}$" × $3\frac{1}{2}$" × .48" SINGLE.
W. FR. IN DEEP TANK :- WEB PL. 23" × .44", FACE ANG. 7" × $3\frac{1}{2}$" × .64" ⅂
SHELL ANG. $3\frac{1}{2}$" × $3\frac{1}{2}$" × .44" SINGLE.
MACH. SPACE :- 10" × $3\frac{1}{2}$" × $3\frac{1}{2}$" × .50"] WITH REV. $3\frac{1}{2}$" × $3\frac{1}{2}$" × .50" ⅂
EXCEPT FR. No 88 WHERE 5" × $3\frac{1}{2}$" × .50" ⅂. ALL EXTEND TO UPP. DK.
UPP. TW. DK. FR. 7" × $3\frac{1}{2}$" × .40" ⅂.

SPARRING 6" × 2" 8" APART IN CARGO SPACES

MACHINERY SPACE

BILGE KEEL 6" × 4" × .50" T 9" × .46" ⅃

BOTTOM PLATING ('A' - 'E') .64" - .48"
BOSS PLATING .74"
3 - STRAKES ('A' - 'C') TO MAINTAIN MIDSHIP THICKNESS TO COLLISION BHD.

BOTTOM FORWARD STRENGTHENED AS PER RULE.

INTERMEDIATE FRAME

NO MAN HOLES IN FLOOR & SIDE GIRDERS UNDER W. S. PILLARS